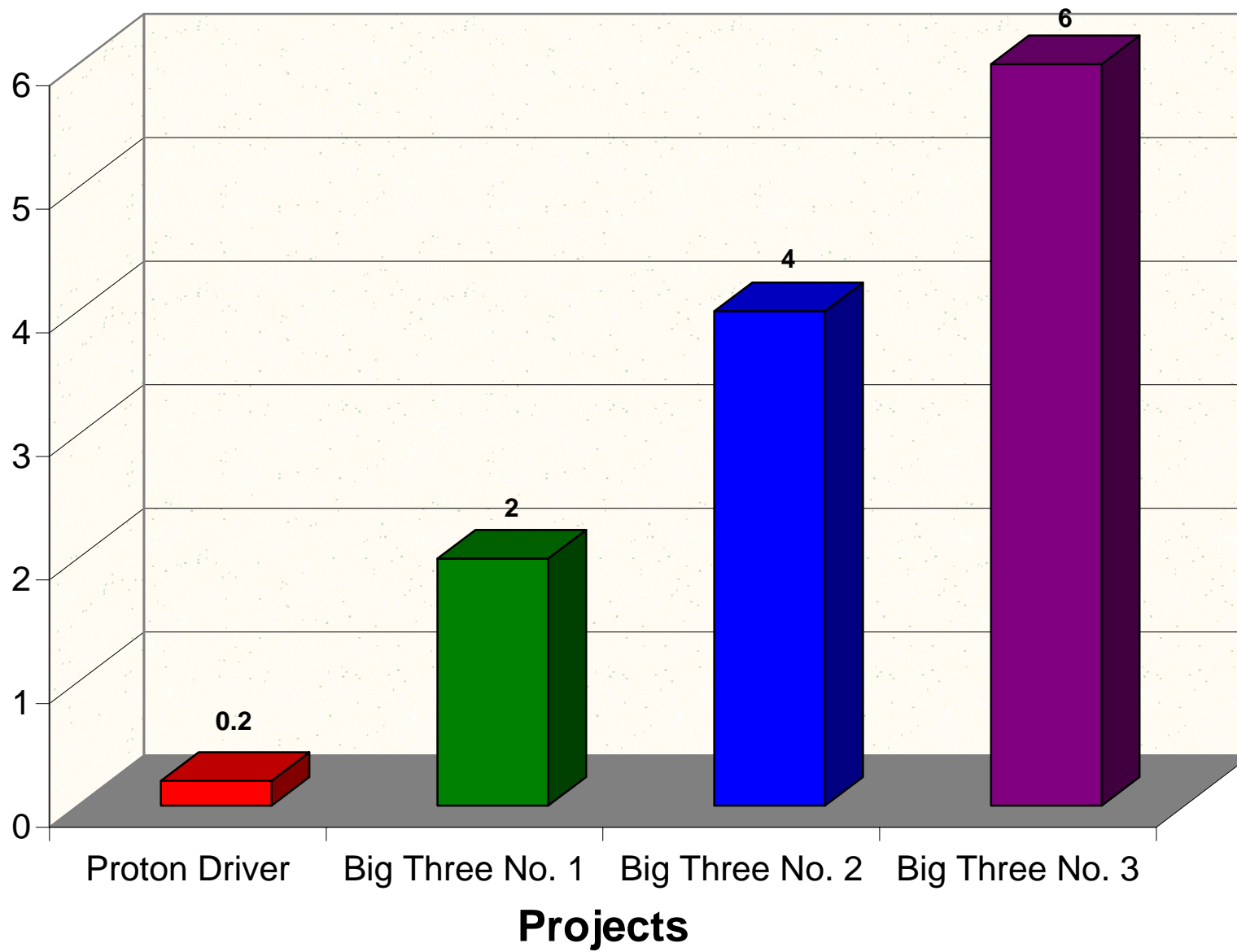


M6 Working Group – High Intensity Proton Sources

(Convenors: W. Chou, J. Wei, J. Galambos)

The U.S. HEP program needs an intense proton source (the Proton Driver) by the end of this decade.

- The US HEP community needs to maintain accelerator competence in high intensity proton machines.
(Japan – JHF, CERN – SPL)
- The physics cases of the Proton Driver are strong. (E1, E5)
- It serves multiple purposes. (A stand-alone facility; the first stage of a neutrino factory; a high brightness source for the VLHC.)
- In addition to The Big Three (LC, NF, VLHC), we need to consider intermediate term projects, i.e., within 10 years.
(At this time there are several proposals on the table. The Proton Driver is a promising one. We hope the HEPAP sub-panel will give it serious considerations and include it in the recommendations.)
- Technically, we know how to build a multi-MW, multi-GeV Proton Driver. With an appropriate R&D program, the design and performance of such a machine can be optimized in a timely manner.
(At this workshop Fermilab and the BNL have respectively presented their Proton Driver Design Report. Either one will work.)
- Financially, the cost of the Proton Driver is affordable. It can be supported by the DOE base line HEP program budget.
(Similar to the cases of the Main Injector and PEP-II)





Fermilab Proton Driver Site Plan

AGS proton driver layout

